

I CLAIM:

1. An overhead display unit comprising:

a housing configured for mounting in an interior region of an automobile, the housing defining a cavity of predetermined shape and size; and

5 a display sized to fit at least partially within the cavity, the display having a viewing surface and being mounted on the housing for pivotal movement between a stowed position wherein the display is at least partially contained within the cavity of the housing, and a deployed position wherein the display pivotally projects from the cavity of the housing to present the viewing surface to an occupant of the vehicle; and

10 a lock mechanism mounted on the housing and adapted to selectively engage the display to maintain the display in the stowed position.

2. The display unit of claim 1, wherein release of the lock mechanism frees the display to pivot away from the stowed position, and further wherein the display is adapted to automatically pivot at least partially away from the stowed position when the lock mechanism is released.

3. The display unit of claim 1, wherein the lock mechanism further includes a catch on the display positioned to selectively engage a detent in the housing to maintain the display in the stowed position.

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4. The display unit of claim 3, wherein the display further includes an edge extending generally transverse to the viewing surface, and the catch is on the edge.

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5. The display unit of claim 4, wherein release of the lock mechanism frees the display to pivot away from the stowed position, and further wherein the display is adapted to automatically pivot at least partially away from the stowed position when the lock mechanism is released.

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6. The display unit of claim 1, wherein the lock mechanism further includes a catch on the housing positioned to selectively engage a detent in the display to maintain the display in the stowed position.

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7. The display unit of claim 6, wherein the display further includes an edge extending generally transverse to the viewing surface, and the recess extends inwardly into the display from the edge.

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8. The display unit of claim 7, wherein release of the lock mechanism frees the display to pivot away from the stowed position, and further wherein the display is adapted to automatically pivot at least partially away from the stowed position when the lock mechanism is released.

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9. An overhead display unit for use in an automobile having a ceiling, the display unit comprising:

15 a display having a viewing surface and being operatively mounted on the ceiling for pivotal movement between a stowed position wherein the display extends generally parallel to the ceiling, and a deployed position wherein the display is pivoted away from the ceiling to present the viewing surface to an occupant of the vehicle; and

a lock mechanism operatively mounted on the ceiling and adapted to selectively engage the display to maintain the display in the stowed position.

10. The display unit of claim 9 which further comprises a mounting structure, the display being pivotally mounted on the mounting structure.

5 11. The display unit of claim 10, wherein the lock mechanism is mounted on the mounting structure.

10 12. The display unit of claim 10, wherein the mounting structure defines a cavity of predetermined shape and size and the display is sized to fit at least partially within the cavity when the display is in the stowed position.

15 13. The display unit of claim 12, wherein the viewing surface is oriented to face the cavity when the display is in the stowed position.

20 14. The display unit of claim 12, wherein the viewing surface is oriented to face out of the cavity when the display is in the stowed position.

15. The display unit of claim 10, wherein the mounting structure is embedded in the ceiling of the automobile.

5 16. The display unit of claim 12, wherein the mounting structure includes a perimeter structure with a flange configured for placement against the ceiling to define a cavity opening, the display being mounted on the mounting structure such that the viewing surface lies generally flush with the flange when the display is in the stowed position.

10 17. The display unit of claim 9, wherein release of the lock mechanism frees the display to pivot away from the stowed position, and further wherein the display is adapted to automatically pivot at least partially away from the stowed position when the lock
15 mechanism is released.

18. An above-seat-level, ceiling-mounted display unit for an automobile having a passenger seating area and a generally planar ceiling, the display unit comprising:

a generally planar mounting frame structure joined with the ceiling in a location overhead and generally forward of the passenger seating area in the automobile, the mounting frame structure being joined generally co-planarly with the ceiling and having a proximal portion closer to the passenger seating area and a distal portion more remote from the passenger seating area;

a generally planar display structure having a viewing surface and being hinged to the mounting frame structure adjacent the distal portion thereof for reversibly swaying in an upright plane, extending both through the mounting frame structure and the passenger seating area, between a stowed position wherein the display structure lies in a plane generally paralleling the plane of the mounting frame structure and a deployed position wherein the display structure occupies a generally upright plane which lies at an angle relative to the plane of the mounting-frame structure with a disposition overhead-viewable by any passenger seated in the passenger seating area; and

a lock mechanism adapted to engage the display and selectively retain the display in the stowed position.

19. The display unit of claim 18, wherein release of the lock mechanism frees the display to pivot away from the stowed position, and further wherein the display is adapted to automatically pivot at least partially away from the stowed position when the lock mechanism is released.

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20. The display unit of claim 18, wherein the mounting frame structure is embedded in the ceiling of the automobile.

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21. The display unit of claim 20, wherein the mounting frame structure defines a cavity into which the display is at least partially received when the display is in the stowed position.

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22. The display unit of claim 21, wherein the lock mechanism extends into the cavity and is adapted to selectively engage the display to retain the display in the stowed position.

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